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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,426	04/17/2001	Tim Dyer	35013.4000	6845

7590 01/16/2002

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EXAMINER

MCDONALD, SHANTESE L

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 01/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.  
09/836,426

Applicant(s)  
Dyer et al.

Examiner  
Shantese McDonald

Art Unit  
3723



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on Aug 16, 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 10, 12, 13, 17-20, 24-28, 32, and 33 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 11, 14-16, 21-23, and 29-31 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shendon.

Shendon teaches an apparatus for polishing a surface of a workpiece comprising a platen, 10, configured to orbit about an axis, (col. 4, lines 13-14), a polishing surface, 22, attached to the platen and a workpiece carrier, 24, which includes a bladder, 214, proximate the polishing surface. Shendon teaches all the limitations of the claims except for orbiting at an speed of 500 to 2000 revolutions per minute, the platen rotating with an orbital radius of .25 to 1 inch, moving the workpiece at a speed of about 0.8 to 3.2 meters per second, and applying a pressure to the carrier at about 0.25 to 2 pounds per square inch. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the invention of Shendon with the above listed limitations, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

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3. Claims 12,13,17-20, 24-28, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aizawa et al. in view of Shendon..

Aizawa et al. teaches a polishing system for removing material from a wafer surface, comprising a plurality of polishing stations, 10a, 10b, a clean system, 26a, 26b, 26c, a load, station, 14, a buffing station, 200. Aizawa et al. teaches all the limitations of the claims except for the platen being configured to orbit with a radius of about 0.25 to 1 inch, orbiting at an speed of 500 to 2000 revolutions per minute, moving the workpiece at a speed of about 0.8 to 3.2 meters per second, and applying a pressure to the carrier at about 0.25 to 2 pounds per square inch. Shendon teaches a platen being configured to orbit about an axis, (col. 4, lines 13-14). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the system of Aizawa et al. with a platen configured to orbit, as taught by Shendon, in order to enhance the systems polishing capabilities. It would have been further obvious to provide the system of Aizawa et al. with the above limitations, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

***Allowable Subject Matter***

4. Claims 7,8,11,14-16,21-23 and 29-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Togawa et al., Yoshida et al. and Katsuoka et al. were cited to show other examples of wafer polishers.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantese McDonald whose telephone number is (703) 308-8722.



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S.L.M.

January 8, 2002